

## **REMARKS:**

Claims 1-16 are currently pending in the application. Claims 1, 2, 5-10, 12-14, and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by G.S. Wing (*Wing*). Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wing* as applied to claim 8 above. Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wing* as applied to claim 13 above, and further in view of W.B. Stout (*Stout*). Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wing* in view of Carlson et al (*Carlson*). New claims 17-20 are hereby added.

By making these amendments, the Applicants make no admission concerning the merits of the Examiner's rejection, and respectfully reserve the right to address any statement or averment of the Examiner not specifically addressed in this response. Particularly, the Applicants reserve the right to file additional claims in this Application or through a continuation patent application of substantially the same scope of originally filed Claims 1-16.

The Applicants submit that the foregoing amendments add no new matter to the application.

## **Rejections Under 35 U.S.C. § 102(b):**

Claims 1, 2, 5-10, 12-14, and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Wing*. Because *Wing* does not disclose all the limitations of claims 1, 2, 5-10, 12-14, and 16, it is respectfully submitted that claims 1, 2, 5-10, 12-14, and 16 are patentable over the cited art.

With respect to Claim 1, Applicants respectfully disagree with the Office Action for at least the following reasons:

- *Wing* teaches the design of a skin for an entire wing airfoil; whereas the Applicants' invention discloses an impact skin for forward portion of an airfoil surface.
- *Wing* teaches an airfoil skin with a grid of thicker material in order to provide material thickness for the skin rivets; whereas the Applicants' invention

discloses an impact skin with pockets configured to progressively deform on impact from an object.

Both of these reasons are discussed in greater detail below.

Regarding the first reason, *Wing* discloses an airfoil skin that includes the entire wing skin. The leading edge portion of the skin in *Wing* is integral to the primary wing skin. The airfoil skin attaches to leading edge formers as well as trailing edge formers. (*Wing*, Col. 2, lines 1-4, Fig. 6 and Fig. 7)

In contrast, the impact skin in the claimed invention includes solely the leading edge member, as cited in Claim 1, as amended. It is unnecessary for the remaining portion of the wing skin to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. For at least this reason, the Applicants submit that Claim 1, as amended, is not anticipated by *Wing*.

Regarding the second reason, *Wing* discloses an airfoil structure which includes a leading edge component 21. The inside surface of the leading edge possesses a plurality of spaced-apart recesses 23 representing a grid 24 of thicker material. The recesses 23 have a thickness which is the minimum required to obtain structural integrity of the leading edge. According to *Wing*, the purpose of having a grid of thicker material 24 is to allow for sufficient thickness to accommodate a countersunk rivet head. Insufficient material thickness at the rivet head could cause failure due to the rivet head pulling through the material. Another detrimental effect would be the countersunk hole forming a “knife edge” in the leading edge which produces high stress concentrations which could lead to crack propagation and result in structural failure. Thus, the function of the recesses in the leading edge of *Wing* is to provide sufficient material thickness for the countersunk rivets, while preventing the addition of weight to the airfoil structure. This functionality is completely different from the claimed invention.

The claimed invention has a leading edge member having pockets being configured to deform in response to an impact from an object. Material is removed to form pockets in such a manner as to allow the leading edge to progressively buckle when

impacted by a foreign object, such as a bird. The controlled deformation of the leading edge is meant to protect structural members aft of the leading edge. Material removal in such a manner is completely different from the recesses and resulting grids in *Wing*. The Applicants assert that *Wing* fails to disclose or suggest the specific limitation of the leading edge pockets configured to deform in response to an impact from an object. For at least these reasons, *Wing* fails to anticipate Claim 1, as amended.

Moreover, the recesses and grids in *Wing* are characteristic of the complete inside surface of the wing skin aft of the leading edge portion. Primarily only the leading edge portion of the wing skin is at risk for bird strike. Since the grid and recesses are of the entire airfoil skin of *Wing*, it is evident that such features were designed for manufacturing purposes only and not tailored to deform in response to impact from a bird or other object.

Claim 1 is hereby amended to more particularly point out and distinctly claim the subject matter that the Applicants regard as their invention. The Applicants submit that Claim 1, as amended, overcomes the Examiner's rejections under 35 U.S.C. § 102(b) and is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 1, as amended, be allowed.

With respect to Claim 2, the Examiner states that *Wing* teaches the protective skin according to Claim 1, wherein the leading edge member (col. 3, line 34) forms the leading edge of a wing member (col. 1, line 1). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. In particular, *Wing* discloses an airfoil skin that includes the entire wing skin. The leading edge portion of the skin in *Wing* is integral to the primary wing skin.

In contrast, the impact skin in the claimed invention includes solely the leading edge member, as cited in Claim 1, as amended. According to the claimed invention, it is unnecessary for the remaining portion of the wing skin, i.e., the aft portion of the airfoil surface, to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. For at least these reasons, the Applicants submit that Claim 2 is not anticipated by *Wing*.

Claim 2 is not hereby amended; however, Claim 2 remains dependent upon Claim 1, which is hereby amended. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 2 is dependent upon an allowable base claim, the Applicants submit that Claim 2 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 2 be allowed.

With respect to Claim 5, the Examiner states that *Wing* teaches the protective skin according to Claim 1, wherein the pockets are formed by a chemical etching process (col. 2, lines 56-7). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. For example, the function of the recesses in the leading edge of *Wing* is to provide sufficient material thickness for the countersunk rivets while preventing the addition of weight to the airfoil structure. This functionality is completely differently as to the present invention as claimed.

In contrast, the present invention claims a leading edge member having pockets being configured to deform in response to an impact from an object. Material is removed to form pockets in such a manner as to allow the leading edge to progressively buckle when impacted by a foreign object such as a bird. The controlled deformation of the leading edge is meant to protect structural members aft of the leading edge. Material removal in such a manner is completely different from the recesses and resulting grids in *Wing*. For at least these reasons, the Applicants submit that Claim 5 is not anticipated by *Wing*.

Claim 5 is not hereby amended; however, Claim 5 remains dependent upon Claim 1, which is hereby amended. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 5 is dependent upon an allowable base claim, the Applicants submit that Claim 5 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 5 be allowed.

With respect to Claim 6, the Examiner states that no weight is given to the process by which the pockets are formed, since the claim is drawn to an article not a method. The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim

1. In particular, the function of the recesses in the leading edge of *Wing* is to provide sufficient material thickness for the countersunk rivets while preventing the addition of weight to the airfoil structure. This functionality is completely different from the present invention as claimed.

In contrast, the present invention claims a leading edge member having pockets being configured to deform in response to an impact from an object. Material is removed to form pockets in such a manner as to allow the leading edge to progressively buckle when impacted by a foreign object such as a bird. The controlled deformation of the leading edge is meant to protect structural members aft of the leading edge. Material removal in such a manner is completely different from the recesses and resulting grids in *Wing*. For at least these reasons, the Applicants submit that Claim 6 is not anticipated by *Wing*.

Claim 6 is not hereby amended; however, Claim 6 remains dependent upon Claim 1, which is hereby amended. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 6 is dependent upon an allowable base claim, the Applicants submit that Claim 6 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 6 be allowed.

With respect to Claim 7, the Examiner states that *Wing* teaches the protective skin according to Claim 1, wherein the leading edge member (col. 3, line 34) is curved about a longitudinal axis so as to form an upper airfoil surface and a lower airfoil surface (fig. 3). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. *Wing* discloses an airfoil skin that includes the entire wing skin. The leading edge portion of the skin in *Wing* is integral to the primary wing skin.

In contrast, the impact skin in the claimed invention includes a leading edge member that forms only a forward portion of an airfoil surface, as recited in Claim 1, as amended. It is unnecessary for the remaining portion, i.e., the aft portion of the airfoil surface, to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. For at least these reasons, the Applicants submit that

Claim 7 is not anticipated by *Wing*.

Claim 7 is not hereby amended; however, Claim 7 remains dependent upon Claim 1, which is hereby amended. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 7 is dependent upon an allowable base claim, the Applicants submit that Claim 7 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 7 be allowed.

With respect to Claim 8, the Examiner states that *Wing* teaches the protective skin according to Claim 7, wherein at least one pocket comprises: a plurality of pockets (23) arranged in a selected pattern over the interior surfaces of the upper airfoil surface and the lower airfoil surface (fig. 3). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. The function of the recesses in the leading edge of *Wing* is to provide sufficient material thickness for the countersunk rivets while preventing the addition of weight to the airfoil structure. This functionality is completely differently as to the present invention as claimed. In contrast, the present invention claims a leading edge member having pockets being configured to deform in response to an impact from an object. Material is removed to form pockets in such a manner as to allow the leading edge to progressively buckle when impacted by a foreign object such as a bird. The controlled deformation of the leading edge is meant to protect structural members aft of the leading edge. Material removal in such a manner is completely different from the recesses and resulting grids in *Wing*. For at least these reasons, the Applicants submit that Claim 8 is not anticipated by *Wing*.

Claim 8 is not hereby amended; however, Claim 8 remains dependent upon Claim 7, and Claim 7 is dependent upon Claim 1, which is hereby amended. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 8 is dependent upon an allowable base claim, the Applicants submit that Claim 8 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 8 be allowed.

With respect to Claim 9, the Examiner states that *Wing* teaches the protective skin according to Claim 8, wherein each pocket (23) is formed in one of the following

geometric shapes: circle, oval, rectangle, square (fig. 3). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. The function of the recesses in the leading edge of *Wing* is to provide sufficient material thickness for the countersunk rivets while preventing the addition of weight to the airfoil structure. This functionality is completely different from the present invention as claimed.

In contrast, the claimed invention claims a leading edge member having pockets being configured to deform in response to an impact from an object. Material is removed to form pockets in such a manner as to allow the leading edge to progressively buckle when impacted by a foreign object such as a bird. The controlled deformation of the leading edge is meant to protect structural members aft of the leading edge. Material removal in such a manner is completely different from the recesses and resulting grids in *Wing*. For at least this reason, the Applicants submit that Claim 9 is not anticipated by *Wing*.

Claim 9 is not hereby amended; however, Claim 9 remains dependent upon Claim 1, which is hereby amended, and intervening claims. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 9 is dependent upon an allowable base claim, the Applicants submit that Claim 9 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 9 be allowed.

With respect to Claim 10, the Examiner states that *Wing* teaches the protective skin according to Claim 8, wherein the pattern of pockets on the interior surface of the upper airfoil surface is a mirror image of the pattern of pockets on the interior surface of the lower airfoil surface (fig. 3). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. The function of the recesses in the leading edge of *Wing* is to provide sufficient material thickness for the countersunk rivets while preventing the addition of weight to the airfoil structure. This functionality is completely differently as to the present invention as claimed.

In contrast, the claimed invention claims a leading edge member having pockets being configured to deform in response to an impact from an object. Material is removed to form pockets in such a manner as to allow the leading edge to progressively buckle

when impacted by a foreign object, such as a bird. The controlled deformation of the leading edge is meant to protect structural members aft of the leading edge. Material removal in such a manner is completely different from the recesses and resulting grids in *Wing*. For at least these reasons, the Applicants submit that Claim 10 is not anticipated by *Wing*.

Claim 10 is not hereby amended; however, Claim 10 remains dependent upon Claim 1, which is hereby amended, and intervening claims. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 10 is dependent upon an allowable base claim, the Applicants submit that Claim 10 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 10 be allowed.

With respect to Claim 12, the Examiner states that *Wing* teaches the protective skin according to Claim 1, further comprising: at least one rib member (30 in fig. 4) connected to the interior surface of the leading edge member for attaching the leading edge member to a substructure of the aircraft (col. 3, lines 17-22). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. *Wing* discloses an airfoil skin that includes the entire wing skin. The leading edge portion of the skin in *Wing* is integral to the primary wing skin.

In contrast, the impact skin in the claimed invention includes solely the leading edge member, as cited in Claim 1, as amended. It is unnecessary for the remaining portion of the wing skin to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. For at least these reasons, the Applicants submit that Claim 12 is not anticipated by *Wing*.

Claim 12 is not hereby amended; however, Claim 12 remains dependent upon Claim 1, which is hereby amended. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 12 is dependent upon an allowable base claim, the Applicants submit that Claim 12 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 12 be allowed.



With respect to Claim 13, the Examiner states that *Wing* teaches the protective skin according to Claim 1, further comprising: a stiffening means (30) connected to the interior surface of the leading edge member for providing localized stiffness to the leading edge member. The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. *Wing* discloses an airfoil skin that includes the entire wing skin. The leading edge portion of the skin in *Wing* is integral to the primary wing skin.

In contrast, the impact skin in the claimed invention includes solely the leading edge member, as cited in Claim 1, as amended. It is unnecessary for the remaining portion of the wing skin to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. For at least these reason, the Applicants submit that Claim 13 is not anticipated by *Wing*.

Claim 13 is not hereby amended; however, Claim 13 remains dependent upon Claim 1, which is hereby amended. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 13 is dependent upon an allowable base claim, the Applicants submit that Claim 13 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 13 be allowed.

With respect to Claim 14, the Examiner states that *Wing* teaches the protective skin according to Claim 13, wherein the stiffening means (30) is an elongated I-shaped beam (30 has flanges 32 and 33 along its top and bottom, giving it an I-beam cross section). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. *Wing* discloses an airfoil skin that includes the entire wing skin. The leading edge portion of the skin in *Wing* is integral to the primary wing skin.

In contrast, the impact skin in the claimed invention includes solely the leading edge member, as cited in Claim 1, as amended. It is unnecessary for the remaining portion of the wing skin to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. For at least this reason, the Applicants submit that Claim 14 is not anticipated by *Wing*.

Claim 14 is not hereby amended; however, Claim 14 remains dependent upon Claim 13, and Claim 13 is dependent upon Claim 1, which is hereby amended. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 14 is dependent upon an allowable base claim, the Applicants submit that Claim 14 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 14 be allowed.

With respect to Claim 16, the Examiner states that *Wing* teaches the protective skin according to Claim 13, wherein the stiffening means (30) is also connected to a substructure of the aircraft (40). The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. *Wing* discloses an airfoil skin that includes the entire wing skin. The leading edge portion of the skin in *Wing* is integral to the primary wing skin.

In contrast, the impact skin in the claimed invention includes solely the leading edge member, as cited in Claim 1, as amended. It is unnecessary for the remaining portion of the wing skin to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. For at least these reasons, the Applicants submit that Claim 16 is not anticipated by *Wing*.

Claim 16 is not hereby amended; however, Claim 16 remains dependent upon Claim 1, which is hereby amended, and intervening claims. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 102(b). Because Claim 16 is dependent upon an allowable base claim, the Applicants submit that Claim 16 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 16 be allowed.

Claims 2, 5-10, 12-14, and 16 are dependent claims based upon independent Claim 1, as amended. Claims 2, 5-10, 12-14, and 16 are not hereby amended, but further limit Claim 1. The Applicants submit that because Claims 2, 5-10, 12-14, and 16 are dependent claims based upon an allowable independent claim, Claims 2, 5-10, 12-14, and 16 are also allowable. Therefore, the Applicants respectfully request that Claims 2, 5-10, 12-14, and 16 be allowed.

**Rejections Under 35 U.S.C. § 103(a):**

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wing* as applied to claim 8 above. The Examiner states that it would have been obvious to one skilled in the art at the time of the invention to create different pockets on opposing sides of the protective skin. The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. *Wing* discloses an airfoil skin that includes the entire wing skin. According to *Wing*, the leading edge portion of the skin is integral to the primary wing skin.

On the other hand, in the claimed invention, the impact skin forms a forward portion of an airfoil surface. It is unnecessary for the remaining portion of the wing skin, i.e., the aft portion of the airfoil surface, to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. *Wing* does not disclose, teach, mention, or suggest these features. For at least these reasons, the Applicants submit that it would not have been obvious to a person of ordinary skill in the art at the time of the invention with knowledge of *Wing* to arrive at the claimed invention.

Claim 11 is not hereby amended; however, Claim 11 remains dependent upon Claim 1, which is hereby amended, and intervening claims. The Applicants submit that the amendments to Claim 1 overcome the Examiner's rejections under 35 U.S.C. § 103(a). Because Claim 11 is dependent upon an allowable base claim, the Applicants submit that Claim 11 is now in condition for allowance. Therefore, the Applicants respectfully request that Claim 11 be allowed.

Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wing* as applied to claim 13 above, and in further view of *Stout*. The Examiner states that it would have been obvious to one skilled in the art at the time of the invention to leave the stiffening means unconnected to the substructure, in order to reduce the weight of the aircraft. The Applicants reiterate here the distinguishing remarks set forth above with respect to Claim 1. *Wing* discloses an airfoil skin that includes the entire wing skin. According to *Wing*, the leading edge portion of the skin is integral to the primary wing skin. *Stout* teaches general wing structure.

On the other hand, in the claimed invention, the impact skin forms a forward portion of an airfoil surface. It is unnecessary for the remaining portion of the wing skin, i.e., the aft portion of the airfoil surface, to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. *Wing* does not disclose, teach, mention, or suggest these features. For at least these reasons, the proposed combination of *Wing* and *Stout* does not disclose or suggest all of the limitations of Claim 15, it is respectfully submitted that Claim 15 is patentable over the cited art.

Claim 15 is not hereby amended; however, Claim 15 remains dependent upon Claim 1, which is hereby amended, and intervening claims. As discussed above, *Wing* fails to disclose, teach, mention or suggest all of the limitations of Claim 1. *Stout* fails to cure all these deficiencies. For at least these reasons, the Applicants submit that it would not have been obvious to a person of ordinary skill in the art to combine the teachings of *Wing* and *Stout* to arrive at the claimed invention.

Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Wing* in view of *Carlson*. Regarding Claim 3, the Examiner states that it would have been obvious to one skilled in the art at the time of the invention to apply *Wing*'s reduced-weight leading edge to horizontal stabilizers in order to reduce the weight of an aircraft. *Wing* discloses an airfoil skin that includes the entire wing skin. According to *Wing*, the leading edge portion of the skin is integral to the primary wing skin. *Carlson* teaches an aircraft with horizontal stabilizers.

On the other hand, in the claimed invention, the impact skin forms a forward portion of an airfoil surface. It is unnecessary for the remaining portion of the wing skin, i.e., the aft portion of the airfoil surface, to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. *Wing* does not disclose, teach, mention, or suggest these features. For at least these reasons, the proposed combination of *Wing* and *Carlson* does not disclose or suggest all of the limitations of Claim 3, it is respectfully submitted that Claim 3 is patentable over the cited

art.

Claim 3 is not hereby amended; however, Claim 3 remains dependent upon Claim 1, which is hereby amended. As discussed above, *Wing* fails to disclose, teach, mention or suggest all of the limitations of Claim 1. *Carlson* fails to cure all these deficiencies. For at least these reasons, the Applicants submit that it would not have been obvious to a person of ordinary skill in the art to combine the teachings of *Wing* and *Carlson* to arrive at the claimed invention.

Regarding Claim 4, the Examiner states that it would have been obvious to one skilled in the art at the time of the invention to apply *Wing*'s reduced-weight leading edge to a vertical fin in order to reduce the weight of an aircraft. *Wing* discloses an airfoil skin that includes the entire wing skin. According to *Wing*, the leading edge portion of the skin is integral to the primary wing skin. *Carlson* teaches an aircraft with a vertical fin.

On the other hand, in the claimed invention, the impact skin forms a forward portion of an airfoil surface. It is unnecessary for the remaining portion of the wing skin, i.e., the aft portion of the airfoil surface, to have an impact skin. This is because the probability of impact with a bird or other object directly upon the upper or lower portions of the wing skin is much lower due to the physical shape of the airfoil. *Wing* does not disclose, teach, mention, or suggest these features. For at least these reasons, the proposed combination of *Wing* and *Carlson* does not disclose or suggest all of the limitations of Claim 4, it is respectfully submitted that Claim 4 is patentable over the cited art.

Claim 4 is not hereby amended; however, Claim 4 remains dependent upon Claim 1, which is hereby amended. As discussed above, *Wing* fails to disclose, teach, mention or suggest all of the limitations of Claim 1. *Carlson* fails to cure all these deficiencies. For at least these reasons, the Applicants submit that it would not have been obvious to a person of ordinary skill in the art to combine the teachings of *Wing* and *Carlson* to arrive at the claimed invention.

**CONCLUSION:**

In view of the foregoing remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment is being filed via the U.S. Patent and Trademark Office's EFS-Web electronic filing system. No fees are deemed to be necessary; however, the undersigned hereby authorizes the Commissioner to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 502806**.

**Please link this application to Customer No. 38441, so that its status may be accessed via the PAIR System.**

Respectfully submitted,

6/30/08  
Date

James E. Walton  
James E. Walton,  
Reg. No. 47,245  
Law Offices of James E. Walton, P.L.L.C.  
1169 N. Burleson Blvd., Suite 107-328  
Burleson, Texas 76028  
(817) 447-9955 (Voice)  
(817) 447-9954 (Facsimile)  
jim@waltonpllc.com

**CUSTOMER NO. 38441**

ATTORNEY FOR APPLICANTS